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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/430,877	11/01/1999	JEFFREY A. MORGAN	10981028-1	7874

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IP ADMINISTRATION
LEGAL DEPARTMENT 20BN
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EXAMINER

GROSS, KENNETH A

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 10/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	09/430,877	Applicant(s)	MORGAN, JEFFREY A.
Examiner	Kenneth A Gross	Art Unit	2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
2a) This action is FINAL. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
5) Claim(s) ____ is/are allowed.
6) Claim(s) 1-12 is/are rejected.
7) Claim(s) ____ is/are objected to.
8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.

- 4) Interview Summary (PTO-413) Paper No(s). ____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, it is unclear why the web application needs to be parsed through the compiler or how the compiler uses the web application to select classes from the libraries. It is understood that the web application acts as an identifier that signals to the compiler which classes to extract from the libraries. Hence, the same functionality can be achieved from passing an identifier to the compiler instead of the entire web application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Narasimhan (U.S. Patent Number 6,446,192).

Narasimhan teaches: (A) that the client-side of the device can run a multitude of web applications, including "Netscape Navigator and Microsoft Internet Explorer" which run customized HTML or Java Applet software (Column 8, lines 55-57); (B) an embedded web server for a device (column 2, lines 46-50) having custom-built virtual machine software (Column 3, lines 43-66), where the web server is application specific. "The compiled applet is then programmed into the network interface memory chip" creating a "customized network interface chip" (Column 9, lines 6-9). Furthermore, the web application requires both the application-specific web server core and an application-specific virtual machine in order to execute. The phrase "such that they require minimized storage space when embedded in the device" is not given any weight by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-7, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan (U.S. Patent Number 6,446,192) in view of Breslau (U.S. Patent Number 5,761,512).

In regard to Claim 1, Narasimhan teaches a method of providing an embedded web server for a device (column 2, lines 46-50) having custom-built virtual machine software (Column 3, lines 43-66), where the web server is application specific. "The compiled applet is then

programmed into the network interface memory chip" creating a "customized network interface chip" (Column 9, lines 6-9). Narasimhan further teaches libraries that can be used to build the customized network interface chip, where said chip includes both the web server and virtual machine capabilities. (Column 9, lines 4-6, lines 46-49). These libraries are separated into categories, such as "Graphics" and "Communications" and are used by the compiler at compile time. Narasimhan does not teach the collection of application-specific classes in a library that the compiler chooses at compile time. Breslau, however, teaches a method of compiling an object from one class in a library, where each class allows the object to operate in a different execution environment (Column 1, lines 56-67), where in the abstract, environments include "processors, operating systems, user interfaces, and software resources." Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a web server for a device taught by Narasimhan, and using the classes mentioned to build this server, compile the server with an application-specific class library taught by Breslau, to create an application-specific web server, since the library taught by Breslau allows for quicker and more organized development. Claim 6 is a system step that corresponds with claim 1, and is rejected for the same reasons as claim 1.

In regard to Claim 2, Breslau teaches a method of compiling classes, where the compiler has access to a set of libraries and an execution environment (with affinities described above), and said compiler automatically chooses a class from the libraries based on the execution environment type. Note that above, it was determined that sending the application identifier to the compiler is equivalent in function to sending the whole application itself.

In regard to Claim 4, Narasimhan teaches an application-specific web server embedded on a circuit chip, which is indeed an electronic device (Column 2, lines 39-46). Claim 7 is a system step and claim 11 is a structure step that corresponds with claim 4, and are both rejected for the same reasons as claim 4.

In regard to Claim 5, Narasimhan teaches that the client-side of the device can run a multitude of web applications, including “Netscape Navigator and Microsoft Internet Explorer” (Column 8, lines 55-57) and that the web server chip is customized to recognize this application (Column 8, lines 4-11). Claim 9 is a system step and claim 12 is a structure step that corresponds with claim 4, and are both rejected for the same reasons as claim 5.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan (U.S. Patent Number 6,446,192) in view of Breslau (U.S. Patent Number 5,761,512) and further in view of Madany (U.S. Patent Number 6,199,196).

The modified Narasimhan device taught above teaches a method of identifying a class from the library needed to run a web application, but does not teach the method of extracting from the class library the other classes required to run the identified class, and recursively extracting required classes. Madany, however, teaches a method of extracting a class for a component from a class file, and then recursively checking to see if there are any class dependencies for this extracted class, and adds these classes to the output file (Figure 6 – items 630-645, Figure 7, Column 8, lines 17-28). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to build into the compiler of the modified Narasimhan device the ability to extract from a class file all the required classes for the web

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server as taught by Madany, because this is a fast way to include all the required classes and without all the required classes, the program would not run. Claim 8 is a system step that corresponds with claim 3, and is rejected for the same reasons as claim 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

KAG
September 30, 2002


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100